



CITY OF HAMILTON
PUBLIC HEALTH SERVICES
 Office of the Medical Officer of Health

TO:	Mayor and Members Board of Health
COMMITTEE DATE:	June 19, 2017
SUBJECT/REPORT NO:	Stock Epinephrine Auto Injector Expansion in Restaurants BOH13040(c) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Dr. Ninh Tran 905-546-2424, Ext. 7113
SUBMITTED BY:	Ninh Tran, MD, CCFP, FRCPC Associate Medical Officer of Health Public Health Services Department
SIGNATURE:	

RECOMMENDATION

- (a) That a volunteer-based stock Epinephrine Auto Injector Program be developed and implemented to facilitate the access to and training on the use of stock epinephrine auto-injectors by up to 50 restaurants in the City of Hamilton under the following conditions:
 - (i) That participating restaurants bear the cost of and be responsible for the maintenance of the epinephrine auto-injectors on their premises;
 - (ii) That Food Allergy Canada provide in-kind training;
 - (iii) That McMaster University provide in-kind evaluation;
 - (iv) That PHS and Paramedic Services staff provide administrative support through existing resources;
 - (v) That participating restaurants sign an agreement promising on-going training of new staff;
 - (vi) That City staff will not be involved in the monitoring of the restaurants for compliance;

- (vii) That a minimum of six participants, representing six different restaurant chains, be registered with interest gauged by an online survey developed by McMaster University;
- (b) That the Mayor and Clerk be authorized to sign agreements with Food Allergy Canada, McMaster University and participating restaurants, and any ancillary documents, with content acceptable to the Medical Officer of Health and in a form satisfactory to the City Solicitor; and
- (c) That item X - Epinephrine Auto Injector Project Next Step be removed from Outstanding Business List.

EXECUTIVE SUMMARY

This report and recommendation are in response to the Board of Health (BOH) motion dated August 11, 2016:

“That staff be directed to report back to the Board of Health on an implementation plan for the next steps in the Epinephrine Auto Injector Pilot Project, by providing the cost and processes involved in establishing a volunteer program for up to 500 restaurants in the City of Hamilton to allow for an onsite auto-injector.”

During the fall of 2016, Public Health Services (PHS) consulted with various stakeholders to determine the processes and costs involved in establishing this volunteer program.

A stock Epinephrine Auto Injector (EAI) program would include three major components:

- 1) Procurement and delivery of the stock EAI,
- 2) Training, and
- 3) Administration costs and processes.

The cost of providing 500 restaurants with stock EAI (both adult and junior) is approximately \$130K. The development and implementation of an online training program would cost \$33K. The cost of providing administrative support is approximately \$40K.

Reducing the scope of the expanded pilot to up to 50 food outlets would only require one train-the-trainer session and could be supported administratively within existing resources. McMaster University and Food Allergy Canada are willing to provide in-kind training provided there are between six and 50 participants, representing at least six

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different restaurant chains. Finally, by requiring participating restaurants to pay for the stock EAI, an expanded pilot of up to 50 restaurants would not impact the City net levy.

Alternatives for Consideration – See Page 7

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: No financial implications.

Staffing: No additional staffing is required. Existing staff would provide administrative support in coordinating a train the trainer session.

Legal: See confidential legal memo.

HISTORICAL BACKGROUND

On October 21, 2013, the BOH directed Hamilton PHS to “...work with Dr. Wasserman at McMaster University and Anaphylaxis Canada to develop an epinephrine auto-injectors (EAIs) pilot program in food outlets by March 31, 2014 at either a Hamilton mall or nationally recognized food outlet chain”, (BOH13040).

On April 22, 2014, the BOH provided further direction, specifying roles and responsibilities, as well as funding amounts and sources (BOH13040(a)). Between September 2014 and March 2016, a pilot study was conducted at Jackson Square mall which made EAIs available at various locations throughout the mall in the event of an anaphylactic reaction. These locations included two stand-alone sites; Tim Hortons (a fast food outlet) and The Anchor Bar (a sit-down restaurant), as well as the mall itself through the Security Office.

In May and June of 2016, the BOH directed staff to put EAIs on all of the City’s fire trucks (BOH16029) and in 72 of the City’s recreational centres (BOH16023). This included training firefighters and recreational staff, with “care and control” of a recreation facility, on the proper use of the EAI. On August 11, 2016, PHS presented an information report (BOH13040(b)) describing the pilot that was conducted, the results of the evaluation of the pilot (including cost estimates) and provided options and considerations for continuing or expanding the pilot.

The BOH directed staff “to report back to the Board of Health on an implementation plan for the next steps in the Epinephrine Auto Injector Pilot Project, by providing the cost and processes involved in establishing a volunteer program for up to 500 restaurants in the City of Hamilton to allow for an onsite auto-injector.”

During the fall of 2016, PHS consulted with various stakeholders to determine the processes and costs involved in establishing this volunteer program.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Not Applicable.

RELEVANT CONSULTATION

Food Allergy Canada and McMaster University, (i.e. Dr. Susan Wasserman), were consulted regarding their interest in continued participation in an expanded pilot. They were also asked whether they would be willing to provide a list of existing training programs they would endorse. Neither Food Allergy Canada nor Dr. Wasserman were able to endorse any existing training programs in which they were not directly involved. Food Allergy Canada and Dr. Wasserman are interested in developing and administering a training program (either online or face-to-face) for a fee. McMaster University (Dr. Wasserman) is interested in a role in the evaluation of the program, as well as developing an online survey to gauge interest of restaurants.

Legal Services and Risk Management were consulted regarding the legal and risk implications for the City of Hamilton, and what role the City should take in the expansion of the Stock Epinephrine Auto Injector Project. The legal implications are attached in a separate confidential Appendix A.

PHS consulted Paramedic Services with regarding whether they could administer a program serving up to 500 restaurants with their existing resources. EMS stated that they could not administer a pilot serving up to 500 restaurants within their existing resources, however could do so with an addition of a new staff position. The new position would be a Community Initiatives Paramedic (CIP) who would support not only stock EAls, but also Automated External Defibrillators (AEDs), as well as CPR initiatives. However, for a one-time pilot serving up to 50 restaurants, Paramedic Services could procure and track EAls within existing infrastructure utilizing modified staff.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

What a Stock EAI Program Would Look Like

A stock EAI program would include three major components:

- 1) Procurement and delivery of the stock EAls,
- 2) Training, and
- 3) Administration costs and processes.

The process involved would vary depending on the funding model, scope and delivery.

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A robust program would include:

- Public communication regarding the program including scope, funding model, eligibility, process, and, roles and responsibilities,
- Interested restaurants would apply and register for the program, legal agreements would be developed and signed,
- Stock EAls would be purchased and arranged for either delivery or pick-up, proof of training may be required to obtain the EAls, and
- A database containing participant outlet, proof of training and inventory (including expiration date) of stock EAls would be developed and maintained.

Costs for a Full Program for up to 500 Restaurants

Stock Epinephrine:

The cost of each injector is approximately \$115.00. Each of the restaurants (up to 500) would require two injectors at minimum (an adult version and a junior version for children). This would result in $500 \times \$230 = \$115,000$.

Training:

- **Online:** McMaster University, with support from Food Allergy Canada, is able to develop and implement an online training program for \$33,000, including a pre-test and post-test evaluation component.
- **Face-to-face:** Food Allergy Canada is able to administer a face-to-face train-the-trainer session (maximum of 50 participants) for \$5,000.

The online training version would be more cost-efficient if participants were >300 (\$33,000 vs. \$35,000). The face-to-face training option would be more cost-efficient if participants were ≤ 300 (\$30,000 vs. \$33,000).

Administration Costs:

The administration costs scope are maintaining a database (restaurant, contract/agreement, proof of training, stock epinephrine including expiry date), housing contracts/agreement, arranging and coordinating training, ordering and coordinating delivery of stock epinephrine, financial administration (tracking expenses, depending on funding model – cost recovery, reimbursement, payment). Note, there will be no monitoring of restaurants as part of the voluntary program. Two options for support are:

1. Done by PHS business support program:
 - To do all administrative functions as above (including coordinating and verifying training), would require 1.0 FTE program secretary at a cost of \$69,000, or,

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- A 0.6 FTE program secretary at a cost of \$40,000 would be required if utilizing the online program offered by Food Allergy Canada, as it does not require coordination of in-person sessions and the online system would also do the tracking of training.
2. Done by Paramedic Services: Currently Hamilton Paramedic Service provides support to community initiatives for defibrillators by using paramedics on modified duties. In order to reliably expand this function, a 1.0 FTE Community Initiatives Paramedic would be required at a cost of \$108,000-\$120,000.

Context and Recommendation to Reduce Scope to up to 50 Restaurants

It is recommended that the expanded pilot be reduced in scope for the following reasons:

- The City of Hamilton has already committed to approximately \$150,000 in past, current and upcoming EAI initiatives. \$82,000 was allocated towards the first stock EAI pilot at Jackson Square, \$27,500 was allocated towards training of City recreational staff and \$37,800 (plus tax) was spent to purchase 193 adult and 193 junior EAI for its fire trucks and 72 recreational centres.
- A volunteer program for up to 500 restaurants would incur a one-time cost of over \$200,000 with annual recurring costs of over \$100,000.

Modifying the expanded pilot program under the following conditions would allow it to be done within existing City resources:

- Reducing the scope of the expanded pilot to up to 50 restaurants would only require one train-the-trainer session and could be supported administratively within existing resources. Food Allergy Canada would be willing to provide in-kind training provided there are between six and 50 participants, representing at least six different chains.
- Requiring participating restaurants pay for the stock EAI, an expanded pilot of up to 50 restaurants would not impact the City net levy.

Finally, it is not recommended that City staff monitor the compliance of restaurants in this expanded pilot (e.g. ensuring they have appropriate stock epinephrine on site, ensuring appropriate signage, etc.) for the following reasons:

- It is a volunteer program, which is not regulated and could not be enforced, and
- Increased risk and legal liability (see confidential legal memo).

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ALTERNATIVES FOR CONSIDERATION

Option 1: Status quo.

Financial: No financial implications.

Staffing: No staffing implications.

Legal: See confidential legal memo.

Pros: No additional financial or staffing impact to the City. Restaurants have flexibility regarding schedule and process regarding using stock EAI.

Cons: Least reach.

Option 2: Cost-shared program for up to 500 restaurants.

The City pays/arranges for training and administration. Restaurant pays for stock epinephrine. In this model, the online training module would be administered by McMaster University with support from Food Allergy Canada. The restaurant would promise to obtain and maintain EAI on-site, as well as ensure training of new staff.

Financial: \$73,000 for PHS only option; or \$120,000 to \$153,000 for Paramedic Services option.

Staffing: 0.6 FTE for PHS option (temporary) or 1.0 FTE for Paramedic Services option (temporary or permanent).

Legal: See confidential legal memo.

Pros: Coordinated program. This is the second least expensive option for the City.

Cons: Expected fewer uptakes given restaurants would need to pay. Still costs over \$100,000 to the City of Hamilton. The City may incur administrative costs that are not needed if less than 500 restaurants are interested in participating.

Option 3: City of Hamilton pays for entire program (up to 500 restaurants, online training).

In this model, the online training module would be implemented by McMaster University with support from Food Allergy Canada. EAIs would be provided after proof of training has been submitted and the restaurant signs an agreement promising on-going training of new staff.

Financial: A total of \$203,000 for program administered by PHS. A total of \$263,000 for program administered by Paramedic Services. This would include \$115,000 for the stock epinephrine, \$33,000 for the online training and between \$40,000 to \$120,000 for administration; depending on whether the program is supported by PHS or Paramedic Services.

Staffing: 0.6 FTE for PHS option (temporary) or 1.0 FTE for Paramedic Services option (temporary or permanent).

Legal: See confidential legal memo.

Pros: Comprehensive, coordinated program. Expected highest uptake. EMS administered program would be most comprehensive as it would cover all stock epinephrine initiatives, integrates it with current CPR and AED initiatives, and supports Cardiac Safe City. It would include staffing support for any further expansion.

Cons: Most costly option to the City of Hamilton. May incur administrative costs that are not needed if interest is less than 500.

The estimated costs above are based on a one-time expanded pilot. An on-going program would have similar, but less recurring costs. Stock EAls would need to be replaced every 18 months, and on-going administrative and training costs would also be required. The replacement costs would be higher if they were used/administered and/or stolen/tampered with.

The estimated annualized recurring costs would be approximately: \$73,000 to \$153,000 (Option 2) and \$168,000 to \$228,000 (Option 3), plus any additional replacement costs due to EAls being used/administered/stolen/tampered with.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

- 1.5 Support the development and implementation of neighbourhood and City wide strategies that will improve the health and well-being of residents.

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APPENDICES AND SCHEDULES

Appendix A to Report BOH13040(c) – Confidential Legal Implications (under separate cover).